



Volunteer Lake Assessment Program Individual Lake Reports

PLEASANT POND, FRANCESTOWN, NH

MORPHOMETRIC DATA

Watershed Area (Ac.):	1,052	Max. Depth (m):	6.4	Flushing Rate (yr ⁻¹)	0.9	Year	Trophic class	KNOWN EXOTIC SPECIES
Surface Area (Ac.):	187	Mean Depth (m):	3.2	P Retention Coef:	0.76	1989	OLIGOTROPHIC	
Shore Length (m):	4,500	Volume (m ³):	2,394,000	Elevation (ft):	817	2004	MESOTROPHIC	

TROPHIC CLASSIFICATION

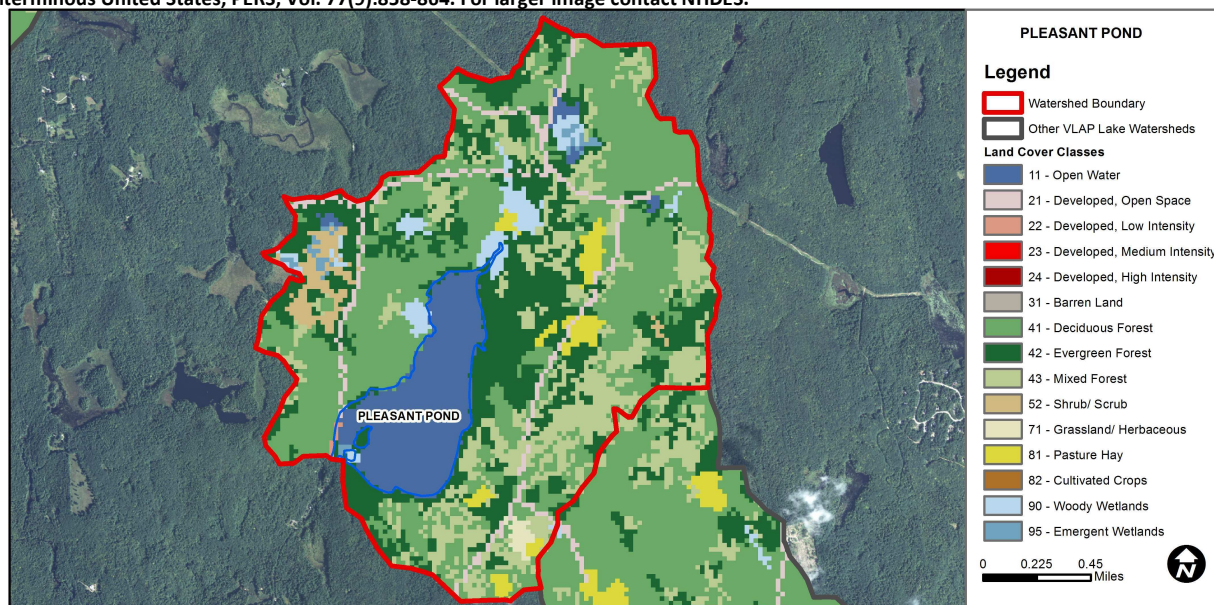
KNOWN EXOTIC SPECIES

The Waterbody Report Card tables are generated from the 2012 305(b) report on the status of N.H. waters, and are based on data collected from 2001-2011.

Designated Use	Parameter	Category	Comments
Aquatic Life	Phosphorus (Total)	Cautionary	<5 samples and median is > threshold. More data needed.
	pH	Slightly Bad	>10% of samples exceed criteria by a small margin (minimum of 2 exceedances).
	D.O. (mg/L)	Encouraging	< 10 samples and no exceedance of criteria. More data needed.
	D.O. (% sat)	Encouraging	< 10 samples and no exceedance of criteria. More data needed.
	Chlorophyll-a	Good	>/=5 samples and median is < threshold but > 1/2 threshold value.
Primary Contact Recreation	E. coli	Good	Geometric means < criteria; however at least 1 exceedance of the single sample criteria occurred.
	Chlorophyll-a	Very Good	At least 10 samples with 0 exceedances of criteria.

WATERSHED LAND USE SUMMARY

Fry, J., Xian, G., Jin, S., Dewitz, J., Homer, C., Yang, L., Barnes, C., Herold, N., and Wickham, J., 2011. Completion of the 2006 National Land Cover Database for the Conterminous United States, PERS, Vol. 77(9):858-864. For larger image contact NHDES.



Land Cover Category	% Cover	Land Cover Category	% Cover	Land Cover Category	% Cover
Open Water	10.9	Barren Land	0	Grassland/Herbaceous	0.43
Developed-Open Space	3.77	Deciduous Forest	36.19	Pasture Hay	2.22
Developed-Low Intensity	0.11	Evergreen Forest	24.45	Cultivated Crops	0
Developed-Medium Intensity	0	Mixed Forest	16.42	Woody Wetlands	3.01
Developed-High Intensity	0	Shrub-Scrub	1.85	Emergent Wetlands	0.68



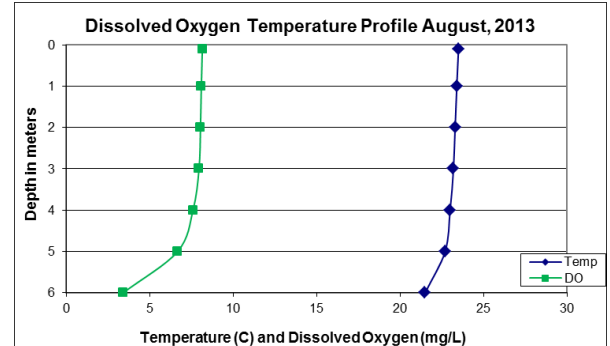
VOLUNTEER LAKE ASSESSMENT PROGRAM INDIVIDUAL LAKE REPORTS

PLEASANT POND, FRANCESTOWN, NH

2013 DATA SUMMARY

OBSERVATIONS AND RECOMMENDATIONS (Refer to Table 1 and Historical Deep Spot Data Graphics)

- CHLOROPHYLL-A:** Chlorophyll levels were low and stable throughout the summer. Historical trend analysis indicates significantly decreasing (improving) chlorophyll since monitoring began. We hope to see this continue!
- CONDUCTIVITY/CHLORIDE:** Deep spot and tributary conductivity levels were low throughout the summer and less than the state median. Historical trend analysis indicates stable epilimnetic conductivity with low variability between years.
- E. COLI:** E. coli levels were well below the state standards for public beaches and surface waters.
- TOTAL PHOSPHORUS:** Deep spot and tributary phosphorus levels were low on each sampling event and epilimnetic phosphorus was much less than the state median. Historical trend analysis indicates significantly decreasing (improving) epilimnetic phosphorus since monitoring began. We hope to see this continue!
- TRANSPARENCY:** Transparency improved as the summer progressed and was much better than the state median. Historical trend analysis indicates stable transparency with low variability between years.
- TURBIDITY:** Deep spot and tributary turbidities were low on each sampling event which is a positive sign considering June and July sampling were conducted after significant storm events.
- pH:** Hypolimnetic pH tends to decrease below the desirable range of 6.5 – 8.0 units. Historical trend analysis indicates stable epilimnetic pH with low variability between years.
- RECOMMENDED ACTIONS:** Pond water quality has improved since monitoring began. We commend lake and watershed residents for their efforts to monitor and improve water quality. The increased frequency and intensity of storm events highlights the importance of managing stormwater runoff in the future. DES' "Homeowner's Guide to Stormwater Management" is a great resource. Keep up the great work!



NH Water Quality Standards: Numeric criteria for specific parameters. Results exceeding criteria are considered a water quality violation.

Chloride: < 230 mg/L (chronic)

E. coli: > 88 cts/100 mL – public beach

E. coli: > 406 cts/100 mL – surface waters

Turbidity: > 10 NTU above natural level

pH: 6.5-8.0 (unless naturally occurring)

NH Median Values: Median values for specific parameters generated from historic lake monitoring data.

Alkalinity: 4.9 mg/L

Chlorophyll-a: 4.58 mg/m³

Conductivity: 40.0 uS/cm

Chloride: 4 mg/L

Total Phosphorus: 12 ug/L

Transparency: 3.2 m

pH: 6.6

Station Name	Alk.	Chlor-a	Cond.	E. Coli	Total P	Trans.		Turb.	pH
	mg/l	ug/l	uS/cm	#/100ml	ug/l	NVS	VS	ntu	
Dam Outlet			31.5	10	7			0.68	6.15
East Middle				10					
Epilimnion	3.90	2.38	30.1		7	4.97	5.45	0.46	6.66
Hypolimnion			30.3		9			0.69	6.41
North Inlet 1			30.0	10	6			0.38	6.61
Public Landing				10					
Se Cove				10					

HISTORICAL WATER QUALITY TREND ANALYSIS

Parameter	Trend	Explanation	Parameter	Trend	Explanation
pH	Stable	Trend not significant; data show low variability.	Chlorophyll-a	Improving	Data significantly decreasing.
Conductivity	Stable	Trend not significant; data show low variability.	Transparency	Stable	Trend not significant; data show low variability.
			Phosphorus (epilimnion)	Improving	Data significantly decreasing.

